

GENERAL DRAINAGE NOTES

All private drainage shall be in accordance with BS8301 and relevant standards. All drainage runs shall be in accordance with Building Regulations.

The contractor is to check the level of existing sewers being used as outfalls or crossing proposed drainage runs PRIOR to laying any pipes. If necessary, the contractor shall refer the matter to the Engineer.

Private house drainage will be flexibly jointed polypropylene or clip pipework. Domestic 100mm unlined shown otherwise.

For all drainage runs for Houses with 100mm unlined shown otherwise must extend 500mm behind the back of the footway/house road. All connections when laid shall be plugged, protected as necessary and sealed with a suitable sealant. All drainage runs shall be connected to the adoptable drainage system to be 150mm dia. Unless connecting to the head of a 100mm dia. FWS.

For all drainage runs where pipe sizes are less than 900mm in vehicular areas or 600mm in other areas protection in the form of a 100mm diameter concrete pipe shall be provided.

Where pipes pass through screen walls, footings or retaining walls they are to be provided over. Under buildings pipes shall be surrounded with a minimum depth of gravel and covered with a minimum depth of 150mm of hardcore. The wall foundation shall be taken down below the invert of the pipe.

All drains do not exceed 600mm deep, plastic or clay access fitted minimum diameter 225mm shall be used. Where necessary proprietary plastic concrete inspection chambers shall be used. Unless otherwise specified, inspection chambers shall be installed at 1000mm deep level. SW chambers and rodding eyes to be 450mm below top.

All gullies and rainwater downpipes connected directly to drains are to be roddable.

All levels of drainage access points are inverted.

For all drainage runs shall be laid at a minimum of 3.0m from the rear of properties where practical to allow for future extension.

All drainage shall be laid upstream and each run between manholes shall be laid upstream prior to the next manhole. The contractor shall be responsible for identifying the line and level of services shall be carried out prior to works commencing.

Where necessary, drainage runs shall be discharged to the collectors obliquely, and in the direction of the main flow.

All low spots on hardstanding areas to the yard provide gullies/AO.

All manholes inspection chambers and downpipes, trafficked areas to be minimum of B125 covers. D400 in all highway areas.

Bottoming to be used where pipe gradient exceeds 1:5 or lateral discharge to sewer.

Where gully is located no less than 1m, ground worker to create low spot for water to run off to, typically 25mm lower.

Where gully is to be minimum 150mm deep, Port M Access, up to 200mm elsewhere.

Where a drain is encountered with SAG features, the feature line is to be wrapped in impermeable membrane

Gullies, access chambers and fire drains may be placed on plant in 'offset' location to provide clarity. See standard details for construction profile

All materials are to be in accordance with NHC Standards 2022

3.34 F40 and surface water disposal.

FOUL SEWER & MANHOLE (S104)

SURFACE WATER SEWER & MANHOLE (SAB)

BACK DROP (MAX 1.5m) – SEE NOTE 15

PERFORATED PIPE

PRIVATE STORM DRAIN
(100 ϕ UNLESS SHOWN OTHERWISE)

DRAINAGE OUTSIDE OF THIS PHASE

PRIVATE FOUL DRAIN
(100 ϕ UNLESS SHOWN OTHERWISE)

450mm ϕ Foul INSPECTION CHAMBER
600mm DEEP UNLESS NOTED OTHERWISE

600mm ϕ PRIVATE FOUL INSPECTION CHAMBER
600mm DEEP UNLESS NOTED OTHERWISE

450mm ϕ STORM INSPECTION CHAMBER
600mm DEEP UNLESS NOTED OTHERWISE

600mm ϕ STORM INSPECTION CHAMBER
600mm DEEP UNLESS OTHERWISE NOTED

VERTED 600mm CULVERT

PROPOSED OVERTFLOW GULLY

SEL 'RANTAINA' DOWN PIPE FILTER CHAMBER

ADAPTABLE BIORETENTION VERGE

PRIVATE RAIN GARDEN

PROPOSED WATER BREAK INLET

INFORMAL COBBLED DRAINAGE CHANNEL
(ADOPTED)

FOOTPATH CROSSING WATER BREAK INLET

PRIVATE WATER BREAK INLET

RAIN WATER PIPE – TO DISCHARGE AT SURFACE LEVEL

DEEP FLOW GUTTER RAIN WATER PIPE

RAIN WATER PIPE – DISCHARGE BGL

110 ϕ POWER SLOT-HS FULL DRAIN
With 5mm SLOTS (PRIVATE)

110 ϕ /160 ϕ POWER SLOT-HS FULL DRAIN WITH
5mm SLOTS (ADAPTABLE)

SEL DIFFUSER UNIT

PRIVATE DRAINAGE CHANNEL*

PROPOSED HEADWALL

PROPOSED SPOT LEVEL

FINISHED FLOOR LEVEL

PROPOSED RETAINING WALL

PROPOSED UNDERBUILD BELOW 225mm BAND COURSE

TANKING

ABC FILTRAPLAN TYPE 6/ SC FN FIN DRAIN (OSA)

UNIFORM DRAINAGE CHANNEL (B125 COVER)

DELIMITATION KERB

PERFORATED DELIMITATION KERB

RAIN WATER BUTT

*DRAINAGE CHANNEL TO BE CONCRETE DISH CHANNEL (OSA) WHERE CROSSING IMPERMEABLE AREAS - PATHS, FOOTPATHS ETC. WHERE SHOWN IN LANDSCAPED AREAS, CHANNEL TO BE MORE INFORMAL - SEE DETAILS DRAWING

	perforated pipe line type amended
C 01.09.22	Plot drainage added
B 21.07.22	Diverted watercourse route updated, amendments to layout following planning comments
A 09.03.22	Minor amendments following client comments

Project: Twynryoden
Merthyr

Client:

Drawing: Engineering Layout
Sheet 1

Scale: 1:250 @ A0 Date: March 2022 Drawn by: NL

Drawing No: 10247 - 100 - 01 Rev: E

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Dwg. Status: **FOR TENDER**
